

## UNCLASSIFIED

Exhibit R-2A, RDT&amp;E Project Justification: PB 2012 Navy

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
1319: Research, Development, Test & Evaluation, Navy BA 2: Applied Research				PE 0602236N: Warfighter Sustainment Applied Res				9999: Congressional Adds			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9999: Congressional Adds	16.257	-	-	-	-	-	-	-	-	0.000	16.257
<b>A. Mission Description and Budget Item Justification</b>											
Congressional Interest Items not included in other Projects.											
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>											
<b>Congressional Add:</b> Advanced Composite Maritime Manufacturing							FY 2010	FY 2011			
<b>FY 2010 Accomplishments:</b> This effort addressed characterization and modeling, process innovation and tooling, design and testing of advance composites integrated into a virtual simulation environment with a focus on Prepreg Tape Placement process and Autoclave Prepreg processing.							1.593	-			
<b>Congressional Add:</b> Assistive Technologies for Injured Service Members							0.797	-			
<b>FY 2010 Accomplishments:</b> This effort advanced noninvasive technologies to compensate for sensory (vision, balance) and mobility deficits.											
<b>Congressional Add:</b> Biosensors for Defense Applications							0.797	-			
<b>FY 2010 Accomplishments:</b> This effort investigated emerging environmental factors in inflammatory and cellular stress responses. The objective of this effort was to measure and characterize the inflammatory and cell stress response of relevant cell systems to key emergent environmental chemical conditions with the goal of defining relevant mechanisms.											
<b>Congressional Add:</b> Composite Materials Enhancements through Polymer Science R&D							5.099	-			
<b>FY 2010 Accomplishments:</b> This effort investigated composite matrix technology for lighter weight, stronger, stiffer, higher toughness materials providing for more accurate property predictions, and accurate service life prediction.											
<b>Congressional Add:</b> Managing and Extending DoD Asset Lifecycles							1.593	-			
<b>FY 2010 Accomplishments:</b> This effort developed technologies to; extend the useful life of facilities and equipment, yield a reduction in maintenance manpower, and contribute to DoD's knowledge base to improve mission capability rates while decreasing life cycle costs by providing an examination and evaluation of corrosion-resistant hybrid coatings for facilities and aircraft as well as investigation and development of concepts for decentralized netcentric decision support tools.											
<b>Congressional Add:</b> Nanotechnology for Anti-Reverse Engineering							2.390	-			

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